

### Remarks

Claims 1-8 are pending in the application. Reconsideration and re-examination of the application is respectfully requested for the reasons set forth herein.

### Rejections Under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-8 under 35 U.S.C. 103(a) as being unpatentable over JP Patent Publication 09238423 issued to Shuichi.

Claim 1, as amended, states that the heat-shrink tube for the electrical power cable comprises a sleeve having an electrically insulating, elastomeric inner layer, *an electrically conductive outer layer*, and between the inner and outer layers a thermoplastic mid-layer which is softenable by application of heat to the sleeve to permit dimensional recovery thereof, the sleeve being of tubular, one-piece construction and the *thermoplastic mid-layer is sufficiently rigid to retain the electrically insulating inner layer in a radially expanded state prior to recovery* whereby the thermoplastic mid-layer supports the electrically insulating inner layer, and in that the outer layer having a thickness less than 50% than that of the thermoplastic mid-layer.

The heat shrink tube of amended claim 1 therefore requires a three layer sleeve formed in one-piece wherein the layers *include* an electrically insulating, elastomeric inner layer, *an electrically conductive outer layer*, and a thermoplastic mid-layer arranged there between which is softenable by application of heat to the sleeve and *sufficiently rigid to retain the electrically insulating inner layer in a radially expanded state prior to recovery*.

The Examiner has identified the contraction tube 20, 30, 12 of Shuichi as the sleeve of the claimed invention. Shuichi teaches several separate embodiments of contraction tubes. Specifically, Shuichi teaches a contraction tube 20 having two layers in Figure 1, a contraction tube 30 having three layers consisting of an inner layer 31 and an outer layer 33 which are semi-

conductive in Figure 2, and a contraction tube 12 consisting of a single layer in Figure 4. None of the aforementioned contraction tubes 20, 30, 12 cited by the Examiner require a three layer sleeve formed in one-piece wherein the layers *include* an electrically insulating, *elastomeric* inner layer, an electrically conductive outer layer, and a *thermoplastic mid-layer* arranged there between and is *sufficiently rigid to retain the electrically insulating inner layer in a radially expanded state prior to recovery*. In the least, Shuichi fails to teach or anticipate the combination of an innermost layer be made of elastomeric material and thermoplastic mid-layer possess rigidity sufficient to hold out an innermost layer. Shuichi neither suggests nor teaches all of the elements of the claimed invention.

Additionally, in Figure 2, Shuichi teaches a contraction tube 30 containing three layers, an outer layer 31, a middle lamella 32 and an inner layer 33 each having a different degree of cross-linking. In all embodiments of the prior art, the outer layer of two or three layers of a sleeve, plus at least one inner layer are heat recoverable. In such arrangements it is unavoidable to heat the sleeve for a long time to at a high temperature in order to initiate heat recovery of such an inner layer. The Examiner's attention is directed to paragraph [0004] of the published application, where heating of the outer layer presents danger of damage to that outer layer. Instead, Shuichi teaches away from this embodiment, requiring that all layers be heat recoverable.

Because Shuichi does not teach nor suggest all of the elements of the claimed invention, the Examiner has failed to set forth a *prima facie* case of obviousness. In the present rejection of claims 2 and 3 from which the amended elements of claim 1 have been taken, the Examiner's baseless assertions that one skilled in the art would select materials as a matter of design choice does not meet his *prima facie* burden of showing obviousness. Here, the Examiner has not

provided any valid reason why the claimed invention would have been obvious to one of ordinary skill except to make a conclusory assertion that the a modification of a single reference would have been a matter of design choice or convenience. In fact every modification, including those which are non-obvious are matters of design choice and do not by virtue of making a design choice render the modification obvious. "The examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *MPEP section 706.02(j)* citing *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). No such convincing line of reasoning is provided here but instead conclusory baseless assertions are made by the Examiner. Reconsideration of claim 1 is therefore respectfully requested. Further, claims 2-8 depend from independent claim 1. Because Shuichi does not teach or suggest all of the elements of claim 1 for the aforementioned reasons, Shuichi also does not teach nor suggest all of the elements of claims 2-8. Removal of the rejection of claims 2-8 is therefore also respectfully requested.

In view of the arguments presented herein, the application is considered to be in condition for allowance. Reconsideration and passage to issue is respectfully requested. If the Examiner has any questions or needs further clarification, he is respectfully requested to contact the undersigned attorney.

Respectfully submitted,

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